Ad-Wb/wb

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Method and Apparatus for Producing Instruction Words

to Trigger Functional Units in a Processor

Abstract

The invention relates to a method and an apparatus for generating

instruction words to trigger functional units in a processor, where a sequence of

data-stationary commands occurs, deriving from a sequence of primary

instruction words. Here the primary instruction words consist of several

instruction word parts. The instruction word parts are each intended to trigger

one functional unit.

According to the invention, in the working off of the instruction words, a

reduction of memory outlay and an enhancement of operating speed are

achieved in that the said partial words of a complex are assembled in a complex

partial word sequence during a configuration phase and stored in a complex

word table. The complex word sequence there deposited is read out, in an

execution phase, from the row indicated by a complex word pointer in the

complex word table. The complex words contained in it are stored parallelwise

by the several assignments internal to the complex words in the corresponding

row and column of the secondary instruction word memory, and after output to

the corresponding functional units in an instruction word output memory, are able

to trigger the required functions.